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EXAMINER
RUSSELL, WANDA Z

ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/658,161	KARAOGUZ ET AL.
	Examiner	Art Unit	
	WANDA Z. RUSSELL	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 April 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-42</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-42</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   **Claims 1-42** are rejected under 35 U.S.C. 102(e) as being anticipated by

Chapman et al. (U.S. Patent 6,643,292 B2, hereafter Chapman).

        For **claims 1, 11, 21, 31, and 41**, Chapman teaches a method, a machine-

readable storage (see processor and protocols in Fig. 8. It means that machine-

readable storage is used), a system (see Fig. 8) for providing enhanced connectivity

(packet data transport mechanism, see title) in a multi-band (see three customer

equipments to Input module in Fig. 8, and customer digital data – voice and data, see

col. 3, line 26, and col. 1, line 33. Those mean multi-band), multi-protocol network

(TCP/IP, see Fig. 8, and DHCP, see col. 5, line 17, and RSVP, see col. 6, line 50. All

are used for this system), comprising:

        aggregating messages of each communication channel from a physical layer (

see Encapsulation Module 84 in Fig. 8; In Internet terminology, <u>aggregating traffic</u>

<u>streams</u> by encapsulating them into a single IP stream is often called tunneling, see col.

2, lines 55-57) of each communication band and each communication channel (see

three customer equipments to Input module in Fig. 8, and customer digital data, see col. 3, line 26. Each customer occupies a channel and each channel has voice and data that is multi-band) associated with each of a plurality of protocols (TCP/IP, see Fig. 8, and DHCP, see col. 5, line 17, and RSVP, see col. 6, line 50) in a single multi-protocol layer of the multi-protocol network (see 84 in Fig. 8, and It is commonly understood in the field of the present invention that <u>a layer under the networking layer is called "transport" layer ... This is in contrast to the layered model of the OSI</u>, see col. 2, lines 33-35 and lines 33-42);

identifying an optimal communication path from among said communication channel based on said single multi-protocol layer (<u>in the packet transport network to allow the set-up of paths with a particular performance over and above best effort</u>, see col. 6, lines 52-53); and

establishing a communication session using said identified optimal communication path (see Tx module 92 in Fig. 8).

For **claims 2, 12, 22, 32, and 42**, Chapman teaches comprising determining based on said aggregated messages, whether at least one of said communication channels, said communication bands, and a combination of said communication channels and said communication bands provides said optimal communication path for said communication session (in the packet transport network to allow the set-up of paths with a particular performance over and above best effort, see col. 6, lines 52-53).

For **claims 3, 13, 23, and 33**, Chapman teaches comprising selecting at least one of said communication and communication bands, and a combination of said

communication channels and said communication bands for providing said
communication session (see Customer equipments, Input module 80, and Tx module 92
in Fig. 8, and customer digital data, see col. 3, line 26).

For **claims 4, 14, 24, and 34**, Chapman teaches comprising locating said single
multi-protocol as a sublayer within a data link layer (It is commonly understood in the
field of the present invention that a layer under the networking layer is called "transport"
layer … This is in contrast to the layered model of the OSI … The data link layer
provides similar functionalities to those of the transport layer of the present description,
see col. 2, lines 33-42. It can be seen that this "transport" layer is a sublayer within a
data link layer).

For **claims 5, 15, 25, and 35**, Chapman teaches comprising interfacing said
single multi-protocol layer above a MAC layer, said MAC layer interfaced with said
physical layer that is located below said MAC layer (see Applicant's Fig. 1a. The
"transport" layer defined by Chapman is within a data link layer, and the data link layer
is above MAC layer. And, Fig. 1a is a block diagram of the OSI model, see Applicant's
specification, P.2, lines 5-6. OSI model is a well-known model, and the Fig.1a is
admitted prior art).

For **claims 6, 16, 26, and 36**, Chapman teaches wherein said single multi-
protocol layer is a super channel sublayer, said super channel sublayer being said
sublayer of said data link layer (It is commonly understood in the field of the present
invention that a layer under the networking layer is called "transport" layer … This is in
contrast to the layered model of the OSI … The data link layer provides similar

functionalities to those of the transport layer of the present description, see col. 2, lines

33-42. It can be seen that this "transport" layer, called super layer by the Applicant, is a

sublayer within a data link layer).

For **claims 7, 17, 27, and 37**, Chapman teaches comprising monitoring at least a

portion of said aggregated messages in said single multi-protocol layer by at least one

of a network management process (network management, see col. 6, line 10), a

bandwidth management process (providing services with bandwidth guarantees, see

col. 4, line 64), a load balancing process (TCP is also inherently provides for

resequencing of out-of-order packets which can occur when switching nodes spread

load over multiple links, see col. 2, lines 65-67), a session control and a QoS

management process (QoS management, see col. 8, line 51).

For **claims 8, 18, 28, and 38**, Chapman teaches comprising interfacing at least

one of said network management process, bandwidth management process, load

balancing process, session control process and QoS management process with said

super channel (It should be noted that the transport network will be much less subject to

change than the public internet making it simpler to introduce quality of service features,

see col. 6, lines 54-57).

For **claims 9, 19, 29, and 39**, Chapman teaches comprising extracting channel

specific data from said single multi-protocol layer by at least one of said network

management process, bandwidth management process, load balancing process,

session control process and QoS management process (An encapsulation module 84

encapsulates those digital data flows so identified in a series of TCP segments and with

a help of an IP header module 86 attaches to each transport IP packet a transport IP header, containing the address of the destination transport access point, see col. 7, lines 43-47).

For **claims 10, 20, 30, and 40**, Chapman teaches comprising sharing channel information acquired by each of said network management process, bandwidth management process, load balancing process, session control process and QoS management process among one or more of said network management process, bandwidth management process, load balancing process, session control process and QoS management process (It is another object of the invention to provide a technique of one or more connections dynamically sharing the bandwidth of a pipe created between two transport access points, see col. 3, lines 6-8).

Response to Arguments

3.   Applicant's arguments filed 4/8/2009 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA Z. RUSSELL whose telephone number is (571)270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/
Supervisory Patent Examiner, Art
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WZR/Wanda Z Russell/
Examiner, Art Unit 2416